



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,691	03/03/2004	David Grant Middleton	07045.0002.00US00	2309
32894	7590	07/06/2006	EXAMINER	
HOWREY LLP C/O IP DOCKETING DEPARTMENT 2941 FAIRVIEW PARK DR., SUITE 200 FALLS CHURCH, VA 22042			POPOVICS, ROBERT J	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

<b>Office Action Summary</b>	<b>Application No.</b> 10/790,691	<b>Applicant(s)</b> MIDDLETON, DAVID GRANT	
	<b>Examiner</b> Robert J. Popovics	<b>Art Unit</b> 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/26/04 &amp; 12/5/05</u> . | 6) <input type="checkbox"/> Other: ____.  |

Art Unit: 1724

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

Claims 1,2,6-8,10-12,16-19,21-26 are rejected under 35 U.S.C. 102(a or b) as being anticipated by **AAPA (Applicant's Admitted Prior Art)**.

#### **Applicant Admits:**

[0003] 2. Description of the Related Art

[0004] Sewerage channels carry a mixture of liquids and solids to treatment plants. During wet weather, some channels receive rain water and consequently their flow levels are raised. To manage increased flow rates, such channels are provided with overflow weirs which allow excess water to leave the sewerage system and enter a watercourse such as a river.

[0005] In order to prevent undesirable solids from leaving the sewerage channel by the overflow weir and entering a watercourse, it is known to provide a screen along the weir. Such a screen allows a flow of water over the weir but screens out solid matter which is maintained in the flow in the sewerage channel.

[0006] A screen in this situation can become blinded, i.e. blocked, by the solid matter in the mixture. Consequently, it is known to provide screens in the form of a horizontal continuous moving band which move past a cleaning device to prevent blinding. During high flow level conditions, the lower surfaces of the screen provide the filtering function while the upper surface is intended to operate above the water level such that it may be cleaned by the brush.

[0007] Such screens are limited in their effectiveness to allow water to flow freely over the weir. In addition, during extreme conditions, the brush may become submerged which leads to ineffective cleaning and the screen becoming rapidly blinded. Consequently, the screen becomes completely ineffective until the extreme conditions have subsided.

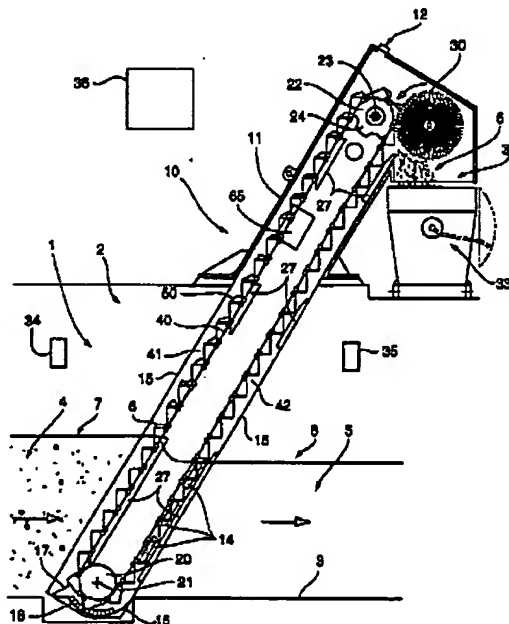
[0008] U.S. Pat. No. 4,242,205 to Hirs discloses a continuous belt filter having a horizontal portion and a portion at an upward angle to the horizontal. The top of the angled portion

Art Unit: 1724

is positioned such that in normal use it is not submerged in the liquid to be filtered. The non-submerged portion is provided with a water or air jet for cleaning.

### ***Claim Rejections - 35 USC § 103***

Claims 3-5 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Larsen (US 5,800,701)**. Claims 3-5 and 13-15 essentially differ from **AAPA** by specifying a rotary brush or cleaning device. Larsen discloses the use of a rotary brush to clean an endless screen:



In view of this disclosure, it would have been obvious to one of ordinary art to employ a rotary brush in the system described by **AAPA**, in order to aid in the cleaning of the screen.

Claims 9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **AAPA (Applicant's Admitted Prior Art)**. Claims 9 and 20 specify a "box" structure. It is submitted that one of ordinary skill in the art at the time the invention was made would

Art Unit: 1724

have readily appreciated the use of a "box" or other similar fluid flow structure in the prior art system(s) described by AAPA, to facilitate fluid flows.

Any inquiry concerning this communication should be directed to Robert J. Popovics at telephone number (571) 272-1164.

A handwritten signature in black ink, appearing to read 'R. J. Popovics', with a horizontal line underneath.

Robert James Popovics  
Primary Examiner  
Art Unit 1724